

Name: _____

p1106: Solve by factoring (v15)

1. Solve the equation

$$x^2 - 8x + 12 = 0$$

$$(x - 2)(x - 6) = 0$$

$$x = 6$$

$$x = 2$$

2. Solve the equation

$$x^2 - 11x + 30 = 0$$

$$(x - 6)(x - 5) = 0$$

$$x = 5$$

$$x = 6$$

3. Solve the equation

$$4x^2 - 5x - 15 = 3x^2 - 8x - 5$$

$$x^2 + 3x - 10 = 0$$

$$(x + 5)(x - 2) = 0$$

$$x = 2$$

$$x = -5$$

4. Solve the equation

$$9x^2 - 8x + 55 = 8x^2 + 7x + 1$$

$$x^2 - 15x + 54 = 0$$

$$(x - 6)(x - 9) = 0$$

$$x = 9$$

$$x = 6$$

5. Solve the equation

$$2x^2 - 3x + 2 = x^2 - 4x + 8$$

$$x^2 + x - 6 = 0$$

$$(x - 2)(x + 3) = 0$$

$$x = -3$$

$$x = 2$$

6. Solve the equation

$$11x^2 - 98x - 9 = 0$$

$$(11x + 1)(x - 9) = 0$$

$$x = 9$$

$$x = \frac{-1}{11}$$

7. Solve the equation

$$11x^2 - 63x - 18 = 0$$

$$(11x + 3)(x - 6) = 0$$

$$x = 6$$

$$x = \frac{-3}{11}$$

8. Solve the equation

$$7x^2 + 22x - 59 = 2x^2 - 5x - 3$$

$$5x^2 + 27x - 56 = 0$$

$$(5x - 8)(x + 7) = 0$$

$$x = -7$$

$$x = \frac{8}{5}$$

9. Solve the equation

$$11x^2 - 47x + 19 = 6x^2 - 4x - 5$$

$$5x^2 - 43x + 24 = 0$$

$$(5x - 3)(x - 8) = 0$$

$$x = 8$$

$$x = \frac{3}{5}$$

10. Solve the equation

$$7x^2 + 15x + 19 = 5x^2 + 4x + 4$$

$$2x^2 + 11x + 15 = 0$$

$$(2x + 5)(x + 3) = 0$$

$$x = -3$$

$$x = \frac{-5}{2}$$